

**Notice of Allowability**

Application No.

09/897,608

Examiner

Qamrun Nahar

Applicant(s)

BATES ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 12/29/2004.
2. ☒ The allowed claim(s) is/are 1-72.
3. ☒ The drawings filed on 03 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>10/8/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                              | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **DETAILED ACTION**

1. This action is in response to the amendment filed on 12/29/2004.
2. The rejection under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention to claims 1-66 is withdrawn in view of applicant's amendment and remarks/arguments.
3. The rejection under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter to claims 1-11 and 34-44 is withdrawn in view of applicant's amendment and remarks/arguments.
4. The rejection under 35 U.S.C. 102(b) as being anticipated by Wahbe et al., "Practical Data Breakpoints: Design and Implementation", 1993, ACM (hereinafter Wahbe) to claims 1-2, 7, 12-13, 18, 23-24, 29, 34-35, 40, 45-46, 51, 56-57 and 62 is withdrawn in view of applicant's amendment and remarks/arguments.
5. The rejection under 35 U.S.C. 103(a) as being unpatentable over Wahbe et al., "Practical Data Breakpoints: Design and Implementation", 1993, ACM (hereinafter Wahbe) in view of Muthukumar (U.S. 6,571,385) to claims 3-6, 8-11, 14-17, 19-22, 25-28, 30-33, 36-39, 41-44, 47-50, 52-55, 58-61 and 63-66 is withdrawn in view of applicant's amendment and remarks/arguments.
6. Claims 1-12, 23, 34-45 and 56 have been amended.
7. Claims 67-72 have been added.
8. Claims 1-72 are pending.
9. Claims 1-72 are allowed.

***Remarks***

10. Claim 9 is missing the status identifier. Since claim 9 appears to be currently amended, the status identifier is interpreted as “currently amended”.

***REASONS FOR ALLOWANCE***

11. The following is an examiner’s statement of reasons for allowance:

The cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, means for setting, at a pre-initial conditional breakpoint program position, a special conditional breakpoint that includes said first Boolean expression, and means for reestablishing said initial conditional breakpoint if said special conditional breakpoint is satisfied as substantially recited in independent claims 1, 12 and 23; means for setting, at a pre-initial conditional breakpoint program position, a special conditional breakpoint that includes the complement of said first Boolean expression; and means for removing said initial conditional breakpoint if said special conditional breakpoint is satisfied as substantially recited in independent claims 34, 45 and 56.

The closest cited prior art, Wahbe teaches detecting loop invariant target addresses; eliminating the check for loop invariant target addresses, and replacing with write checks in a pre-header block that dominates all entrances to the loop. However, Wahbe fails to teach means for setting, at a pre-initial conditional breakpoint program position, a special conditional breakpoint that includes said first Boolean expression, and means for reestablishing said initial conditional breakpoint if said special conditional breakpoint is satisfied as substantially recited in independent claims 1, 12 and 23; means for setting, at a pre-initial conditional breakpoint

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program position, a special conditional breakpoint that includes the complement of said first Boolean expression; and means for removing said initial conditional breakpoint if said special conditional breakpoint is satisfied as substantially recited in independent claims 34, 45 and 56; and as pointed by the applicant's remarks/arguments filed on 9/23/04, on pg. 21, par. 5 to pg. 25, par. 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

12. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (571) 272-3730. The examiner can normally be reached on Mondays through Fridays from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or processing is assigned is (703) 872-9306.

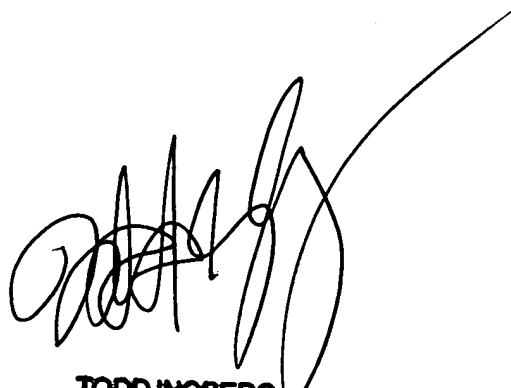
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Qamrun Nahar  
April 7, 2005



**TODD INGBERG**  
**PRIMARY EXAMINER**